"BACK TO WORK"**THE INDUSTRIAL REHABILITATION UNITS OF
THE MINISTRY OF LABOUR AND
NATIONAL SERVICE**

BY

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"Rehabilitation" is a word often used in various contexts. In the realm of medicine it has had a somewhat chequered career, and even now is capable of misconception. It has been divided into such terms as medical or hospital rehabilitation, industrial rehabilitation, resettlement, and that unfortunate term "reablement." However convenient this may be from departmental, sectional, or other angles, it is essential to recognize that "rehabilitation of the sick or injured is a continuous process"¹ which should end in satisfactory resettlement in industry. There is no clear-cut dividing-line between medical and industrial rehabilitation, and ideally there should be none between industrial rehabilitation and resettlement.

The function of rehabilitation has been described as "to restore the worker to industry, the citizen to society, and the man to himself,"² and to this end the services provided by the Ministry of Health and the Ministry of Labour and National Service play most important parts.

Throughout the war years the prevention and limitation of disability and invalidism and the refitting of those who had been out of work for considerable periods through physical disablement became matters of supreme importance. This task was shared by the Ministry of Health, which was responsible through the hospitals for the medical treatment and medical rehabilitation, and by the Ministry of Labour and National Service, which was responsible for resettlement in suitable work, including, where necessary, the provision of industrial rehabilitation, vocational guidance, and training. With the conclusion of the war the sense of urgency has been somewhat lost, and it is necessary to recognize that to-day, when full employment of both able-bodied and disabled persons is equally essential to the national economy, full use should be made of the facilities which are available for putting people back into productive work.

A paragraph in a Ministry of Health circular to regional hospital boards concludes with these words: "Every practitioner who has the care of serious and disabling complaints must assume responsibility for seeing his patients through to the point where they can either resume their former employment or be passed to the disablement resettlement officer of the Ministry of Labour and National Service (D.R.O.), for placing in some suitable alternative occupations. The responsibility for assessing disability and advising on residual capacity and suitable conditions of work belongs to the medical practitioner. The responsibility of placement in work rests with the D.R.O."³

This statement of policy by the Ministry of Health has not achieved the wide publicity and response which are its proper due, and in this article an attempt is made to illustrate one of the methods used by the Ministry of Labour and National Service to assist the doctor, be he

specialist or general practitioner, to assume this additional medico-sociological responsibility.

Section 3 of the Disabled Persons (Employment) Act, 1944, requires the Minister of Labour and National Service to provide industrial rehabilitation courses for persons who are unable to work owing to unfitness due to injury, disease, or deformity, and who require these facilities to make them fit to return either to their previous employment or to other employment which is most suited to the altered capacity for work.⁴ These facilities are provided by the Ministry of Labour and National Service in their industrial rehabilitation units (I.R.U.s), and in most cases follow on as a natural sequence to hospital or general-practitioner treatment services. Approximately 20,000 people have now passed through the I.R.U.s.

The first I.R.U. was set up at Egham, Surrey, at the beginning of 1944. This is a residential unit. Since 1948 13 other units (non-residential) have been set up at Birmingham, Bristol, Cardiff, Coventry, Edinburgh, Felling-on-Tyne, Glasgow, Hull, Leeds, Leicester, Long Eaton, Manchester, and Sheffield. There are places (available to both men and women) for 100 patients at each unit except Egham, which can take 200, and although the units are non-residential, with the exception of Egham and Leicester (50 residential places), suitable lodgings can be found near to the units.⁵

Objects and Aims

These can be shortly summarized as: (1) To restore the fitness and confidence of persons suffering from physical or mental disabilities which handicap them in obtaining and keeping employment. (2) To discover by observations and tests and with medical advice (a) the personal factors which may be impeding satisfactory settlement in employment (there is abundant evidence that the importance of these factors is increasing daily), and (b) the types of employment most likely to lead to permanent settlement.

Most people after sickness or injury are able to return to their previous employment and the same job. Sometimes there is a permanent disability which makes a return to the previous job of work impossible, and in this type of case the assessment of the remaining ability in relation to future employment is essential if resettlement is to be permanent. It is amazing to find that, given the proper incentive, people can draw on their remaining abilities to achieve almost the same result in work effort as they obtained prior to the illness or injury.⁶ There are, of course, obvious exceptions. It is assumed in all cases that the result will be *work*, usually of a permanent character, and it is a condition of entry to the industrial rehabilitation course "that the applicant will not only be fit for work at the end of the course but will have a reasonable chance of getting employment suited to his capacity."

Availability of Courses

Any person aged 16 or over who has suffered illness or injury and is in need of industrial rehabilitation in order to get fit for work is eligible to apply for a course. These persons are divided into two main groups:

(1) Persons in this group are recommended on the completion of active medical treatment by consultants and specialists, hospitals, general practitioners, and industrial medical officers as being in need of a period of graduated hours of industrial activity before they can resume a full

day's employment. There are cases which also require vocational guidance for a new type of employment. There are no formalities in submitting the person for industrial rehabilitation—a simple recommendation by a doctor that his patient is in need of industrial rehabilitation is sufficient to enable the disablement resettlement officer (D.R.O.) of the local employment exchange to take the necessary action to have the application considered by the nearest I.R.U. At present 66% of the applications submitted come from hospitals and general practitioners in almost equal numbers: this percentage should grow considerably as the advantages to patient, doctor, and country are fully recognized.

(2) This group comprises unemployed persons, mostly disabled men and women who have been unemployed for some considerable time largely because they have not been able to obtain this particular kind of help when they needed it. Most of these cases are identified by the D.R.O.s from among persons attending at the local employment exchanges. It is the gaps between the phases of resettlement which are so damaging and soul-destroying, and the constant endeavour of the department is to make rehabilitation in all its phases a continuous process from the onset of medical treatment to employment or re-employment.

The applications are submitted to the units, who decide whether the cases will benefit from a course of industrial rehabilitation, having regard to all the circumstances. Very few cases are in fact rejected, because each unit has had experience of amazingly successful results in cases which seemed far beyond any assistance. The maximum length of the course is 12 weeks, but the usual period is from six to eight weeks. Maintenance allowances are paid according to the family circumstances. An analysis of the cases leaving three of these units is given in Table I. The age incidence of patients attending three of these units is shown in Table II. The

TABLE I.—Analysis of 200 Cases Leaving Each of Three Units

	Surgical	Medical	Psychiatric	Others
Unit A	22%	51%	20.5%	6.5%
Unit B	19%	54%	19%	8%
Unit C	25.5%	55.5%	10.5%	8.5%

TABLE II.—Age Groups

	17 and Under	18–29	30–40	41–47	48–55	56 and Over
Unit A	—	33.5%	25.5%	15.5%	20%	5.5%
Unit B	—	36%	28%	16%	16.5%	3.5%
Unit C	0.5%	25%	24.5%	18.5%	21.5%	10%

age group under 40 varies from 50% to 64% and age group 48 and over varies from 20% to 31.5%—that is, a considerable proportion of older people are benefiting from the courses. This proportion will rise as the liaison between hospitals, general practitioners, and unit is increased—a most important factor in the continued employment of the elderly.

The I.R.U. and Its Staff

The facilities of I.R.U.s include a gymnasium, workshops, and gardens, and these are used as necessary to meet the needs of each individual undergoing a course. There is no standard curriculum, but an individual approach for each case. The workshops provide toning-up exercises on productive work as well as an opportunity to test vocational aptitudes and the ability to stand up to a full day's work. Outdoor work in the gardens and physical training in the gymnasium supplement workshop activities. Vocational training is not given

during the course, but it may be given subsequently in a Government training centre, technical college, or an employer's establishment.

The actual working of the I.R.U. is the function of a team of specialists (see diagram) headed by the rehabilitation officer, who is chosen for his industrial experience and administrative ability and whose responsibility is to guide and co-ordinate the work of the whole team.

The medical officer attends on a sessional basis up to a maximum period of 15 hours a week. Each new entrant is examined as soon as possible after admission, and previous medical histories are usually available. The purpose of the initial medical examination is to: (a) diagnose the nature and extent of the disability (if any); (b) assess its effect on working capacity; (c) determine what, if any, toning up is necessary; and (d) decide whether, after any necessary toning up has been given, a return to pre-disability occupation is likely to be possible.

The medical officer provides the link between the unit and the medical agency which submitted the case. He is responsible for the work of the remedial gymnast, who, working in the well-equipped gymnasium (Fig. 1),

FIG. 1.—Gymnasium exercises.

arranges classes for the various types of disability. The remedial exercises in the workshops aim at correcting functional deficiencies or providing diversionary occupation (Fig. 2). It must be emphasized that at the earliest stage the atmosphere of productive work is introduced. There may be controversial opinions about the introduction of "work atmosphere" at the earliest stage, but the results obtained have justified this approach.

The functions of the nurse require no elaboration here; she is indispensable to the work of the medical officer.

The vocational officer is a trained psychologist whose special function is to discover in what particular direction lie the talents and aptitudes of those men and women who have to take up new employment and are in need of guidance on the kind of employment to seek. In vocational guidance the idea is to match the fundamental needs and the physical and mental capacities to a vocation, but it is a role that is rarely completely achieved. No man's vocational scheme of life can be separated from his total personality, and man has to be

FIG. 2.—Working a treadle fretwork machine in order to learn accurate control of artificial arm.

considered in relation to this total environment, which to a very large extent conditions his total personality. The real test of a man's capacity is the actual performance under normal employment conditions or under a close simulation of them. This is a further reason why units tend to insist on the early introduction to normal employment conditions.

Occupational supervisors are in charge of the workshops and gardens and outdoor activities, and there is a social worker to assist with social, financial, and domestic difficulties which may be impeding progress and resettlement. The D.R.O. is mainly concerned with obtaining employment for those who need placing after their course of rehabilitation at the unit has been completed.

Although each member of the staff has his own distinctive contribution to make, it is only by their close collaboration as a team that the work can become fully effective. Each patient has his or her course carefully planned by the team in conference, and the succeeding stages are the result of team discussion. When the concluding stage of the course has been reached there is a "case conference" by the team, at which a recommendation is made regarding the most suitable type of employment that can be undertaken by the rehabilitatee in his or her improved physical and mental state. *Over 80% of the persons who complete a course are found suitable employment or are placed in training courses which lead to employment.* In about 14% the recommendation is for vocational training in a skilled trade.

It has recently been recognized that workers of 56 upwards are capable of training up to a state of semi-skill if the job is sufficiently broken down. This is a definite advance on previous policy that it is unwise to attempt to train to any degree of skill after the age group 40–45.

Table III illustrates the success of the scheme.

The proportion of premature terminations may seem high, but it includes an appreciable number of persons

TABLE III.—Cumulative Total of Entrants and Terminations from Date of Opening to April 30, 1951, and Number in Units at that Date

No. of Entrants	No. of Terminations			No. in Units at April 30, 1951
	Completed Course and Recommended for Placing in Employment or Vocational Training	Premature Terminations	Total	
21,771	17,327	3,272	20,599	1,172

who are automatically recorded as "terminations" after a period of two weeks' sick absence and who may subsequently return to the unit.

Conclusion

With the further co-operation of hospitals, consultants, and general practitioners, still greater progress will be made and a great preventive and social objective will be achieved—the recognition of the tremendous productive potentialities present in every individual regardless of physical defect.

The profession must accept its social responsibility in resettlement by the early "recognition of physical and mental defect" and by using all the available resources to achieve a successful return to work. Rehabilitation should be "the consummation of good work—not the salvaging of inferior," and, as truly stated by A. Miller,² "it should be judged by its social failures rather than by its medical successes." The I.R.U.s of the Ministry of Labour and National Service have achieved a large measure of success in the resettlement of disabled and potential disabled persons. The closer collaboration and co-operation of the medical profession with these units can largely aid in eliminating this social problem.

REFERENCES

- ¹Brussels Treaty Permanent Commission Joint Committee on the Employment of the Disabled, June, 1950.
- ²Coal Board Conference on Rehabilitation, October, 1949.
- ³Ministry of Health Circular, RHB 49/36.
- ⁴Disabled Persons (Employment) Act, 1944. Section 3.
- ⁵Ministry of Labour Gazette, May, 1950.
- ⁶Kessler, H. H. (1947). *Rehabilitation of the Physically Handicapped*. New York.

THE MAKING OF DEXTRAN

There are three possible types of substitute for human plasma in transfusion therapy: some other kind of protein (e.g., gelatin), a synthetic polymerized plastic (e.g., polyvinyl pyrrolidone), or a carbohydrate. So far protein substitutes have proved unsatisfactory, and, while one plastic ("plasmosan") is now commercially available as a 3.5% solution in standard transfusion bottles, by far the most highly developed group is that of the carbohydrates. Gum acacia has now finally been abandoned, but laminarin from seaweed is under trial, and dextran, a starch-like substance made by the bacterium *Leuconostoc*, is being widely tried out and has had considerable clinical approval (see p. 591). The dextran now being increasingly used in British hospitals is principally made by Dextran, Ltd., formed in 1949 as an offshoot of the East Anglia Chemical Company, Ltd., and the present factory at Darlington, producing 20,000 half-litres a month, has already given rise to another branch of similar size at Johannesburg (South Africa), and may soon be producing also in the United States. Apart from some work done in Sweden long-standing chemical research on dextran has been undertaken only in Britain. Its use as a plasma substitute has developed from the beginning through a unique association of Government, university, and commerce. The Medical Research Council, the Lister Institute, and the Colonial Products Research Council have been interested in the project from the start, and its development